

DERWENT-ACC-NO: 2002-609032
DERWENT-WEEK: 200265
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TITLE: Hybrid power supply apparatus for an off-road electric vehicle, such as construction site support vehicles and fork-lift trucks, comprises fuel cell assembly and energy storage device that fit within a conventional battery tray

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PATENT-ASSIGNEE: CELLEX POWER PROD INC[CELLN]

PRIORITY-DATA: 2001US-0785878 (February 16, 2001)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE
PAGES	MAIN-IPC	
WO 200267346	August 29, 2002	E
043	H01M 002/10	
A2		

DESIGNATED-STATES: AE AG AL AM AT AU AZ BA BB BG BR BY BZ
CA CH CN CO CR CU CZ D
E DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP
KE KG KP KR KZ LC LK
LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO
RU SD SE SG SI SK SL
TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW AT BE CH CY
DE DK EA ES FI FR GB G
H GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ
UG ZM ZW

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO
APPL-DATE		
WO	N/A	2002WO-CA00184
February 13, 2002		
200267346A2		

INT-CL (IPC): B60K001/04; B66F009/075 ; H01M002/10 ;
H01M016/00

ABSTRACTED-PUB-NO: WO 200267346A
BASIC-ABSTRACT: NOVELTY - The fuel cell assembly fits within the conventional battery tray, the power supply comprises a fuel cell and a storage battery that are designed to meet the average load requirements of a vehicle. A fuel cell (60) is mounted in the upper part of the housing (32) and above a storage battery (64). A controller (70) is located adjacent to the fuel cell and the power output (44) is coupled to a DC bus (66). A reformer (68) is connected by fuel lines to a fuel storage chamber (50).

DETAILED DESCRIPTION - An independent claim is included for a method of converting an electric vehicle to hybrid power

USE - Hybrid power supply apparatus for electric off road vehicles such as construction site support vehicles and fork lift trucks.

ADVANTAGE - Uses a similar interface and therefore is interchangeable with a conventional battery and does not require vehicle modification. The battery and power supply are able to respond to very high instantaneous load demands.

DESCRIPTION OF DRAWING(S) - Isometric view of the power supply apparatus

Housing 32

Output 44

Fuel storage 50

Fuel cell 60

DC bus 66

Reformer 68

Controller 70

CHOSEN-DRAWING: Dwg. 7/13

TITLE-TERMS:

HYBRID POWER SUPPLY APPARATUS ROAD ELECTRIC VEHICLE
CONSTRUCTION SITE SUPPORT
VEHICLE FORK LIFT TRUCK COMPRISE FUEL CELL ASSEMBLE ENERGY
STORAGE DEVICE FIT
CONVENTION BATTERY TRAY

DERWENT-CLASS: Q13 Q38 X16 X21 X25

EPI-CODES: X16-C09; X21-A01B; X21-A01M; X21-B01A; X21-B04;
X25-F05A;

SECONDARY-ACC-NO:

Non-CPI Secondary Accession Numbers: N2002-482251

